

Claim Listing

1-73. (Canceled)

74. (New) A data processing system comprising:

one or more computer processors programmed to receive health information from a patient using software operable to pose a logic-driven, branching series of questions to identify, discriminate current from past, and prioritize said patient's major complaints, wherein said major complaints are ranked by relevance to said patient; and wherein exploratory questions are used to survey selected topics;

wherein said exploratory questions ask about groups of related items;

wherein said exploratory questions determine a time frame of relevance to said patient and said patient's judgment of relevance of a symptom, wherein said relevance is characterized by one or more of: patient's priority for discussion with a clinician, severity of said symptom, and magnitude of problems or impact on quality of life resulting from said symptom;

wherein said software is further operable to construct subsequent, more detailed questions from a database of potential questions, based upon said patient's responses to said exploratory questions;

wherein said software is further operable to match said patient to a pre-selected interview configuration profile from a family of such profiles that determine inquiry scope and inquiry depth of a given patient interview, said inquiry scope specifying a set of interview topics to be covered, and said inquiry depth specifying a level of detail for a characterization of elicited symptoms; and

wherein said software is further operable to dynamically integrate input from multiple sources to determine a depth of detailed questioning to pursue, said sources providing data regarding relevance to patient, desired depth of characterization detail for a topic as determined by a configuration profile, or medical importance of a given topic as determined by experts.

75. (New) The system of claim 74, wherein said system is operable to integrate an assessment of characterization detail for related symptoms in a group of associated symptoms;

- (a) wherein potential associations between symptoms are identified at a time of authoring of interview content based upon clinical knowledge;
- (b) wherein severities of candidate symptoms in associations are obtained during an interview;
- (c) wherein a most severe symptom in an association (hereinafter "index symptom") is identified;
- (d) wherein characterization detail is obtained about one or more index symptoms, as appropriate for clinical importance or relevance to said patient;
- (e) wherein an interview question is asked about whether any of said patient's other symptoms in said association share features in common with said index symptom;
- (f) wherein, for areas where features are shared, redundant characterization detail is skipped for associated symptoms or subsequent interview questions characterizing associated symptoms are combined; and

(g) wherein a risk of frustrating said patient is reduced by detecting relations between symptoms, when they exist, or allowing symptoms to stand alone, when no association is identified.

76. (New) The system of claim 74 further operable to identify and characterize severity and functional impact of multiple concurrent symptoms;

(a) wherein related symptoms are grouped in order to facilitate assessment of symptom severity, frequency, and impact on functional status and quality of life;

(b) wherein identifying and characterizing symptoms and measuring symptom severity are used to support assessment of a plurality of concurrent symptom groups; and

(c) wherein separate scores are calculated for each of said symptom groups in order to determine whether said patient has one or more than one symptom complex and to separately assess severity and functional impact of each symptom group over time.

77. (New) The system of claim 74 further operable to assess impairment in quality of life and functional status in relation to a plurality of symptoms and medical conditions;

(a) wherein quality of life questions are created to probe limitations in a plurality of generic domains that may be related to more than one underlying medical condition;

(b) wherein quality of life questions are asked without reference to whether a limitation is due to a health or emotional condition, symptoms, injury, or other problem; and

(c) wherein impact of each group of related symptoms or each health condition is determined by asking about resulting severity, frequency, or perceived impact on quality of life.

78. (New) The system of claim 77,

(a) wherein said software is operable to display areas of generic quality of life and functional status that said patient has reported are impaired, and to offer said patient choices about potential causes of such impairment; and

(b) wherein said software is operable to sequentially display each of one or more generic quality of life issues reported by said patient to be limited by symptoms or health conditions, list various symptoms and health conditions that said patient has reported are most severe, and offer response options to indicate a degree to which each symptom or health condition causes limitation of indicated generic quality of life domains.

79. (New) The system of claim 74 further operable to directly assess dimensions of the quality of care and provide feedback to clinicians or administrators about areas where action could be taken to correct apparent problems with said quality;

(a) wherein said system is operable to display questions regarding one or more of: patient understanding of a health condition, patient health attitudes and behaviors, patient willingness to change health behaviors, patient perception of communication with a clinician and whether patients were heard and respected, patient observation about health care received, patient understanding of what to expect and what to watch out for

regarding health conditions or treatment, patient understanding of treatment received, patient understanding of medications to be used, or patient compliance with medication and with treatment; and

(b) wherein patient-reported quality of care data are integrated into a clinical report and flagged to identify problem areas; such quality improvement data are presented to clinicians with suggestions regarding correcting apparent problems with the quality of care; or said software provides brief and focused education to a patient who needs or desires additional information about said patient's health condition.

80. (New) The system of claim 74, further operable to calculate a severity score based on patient data regarding severity of symptoms;

(a) wherein different levels of severity are assigned different scores; and
(b) wherein symptoms from a similar region or system of a patient's body are grouped together, after which a score assigned to each group is computed, and individual scores are reported to facilitate interpretation by a clinician with regard to relative importance of a symptom group and possible implications of observed symptom patterns, and, given scores of a particular group across successive interviews of said patient, to reflect changes in severity over time.

81. (New) The system of claim 74, further operable to:

(a) automate patient recruitment for research trials;

(b) query patients during routine use of said system as to whether said patients would like to be informed regarding research studies for which said patients are eligible;

(c) receive eligibility requirements for research studies and use system logic to identify patient responses regarding when one or more of symptoms or medical conditions that may qualify patients for a research study; and

(d) inform a patient and a research coordinator of studies for which said patient is eligible.

82. (New) The system of claim 80, further operable to obtain informed consent from a patient who agrees to participate in research using interview content approved by an appropriate Institutional Review Board.

83. (New) The system of claim 74, further operable to calculate symptom severity score based on patient data regarding severity of symptoms;

(a) wherein different levels of severity are placed in author-defined groups;
(b) wherein patient-inputted data with regard to different levels of severity are used to compute scores, with a separate score assigned to each author-defined group;
(c) wherein said scores are reported to clinicians, along with system-generated interpretations with regard to possible implications of observed symptom patterns; and
(d) wherein an accumulation of scores for a particular group across successive interviews of said patient reflects changes in severity over time.